

1 **CLAIMS**

2 1. A method comprising:  
3 receiving a command from a decoder application at an application program  
4 interface (API); and  
5 generating one or more filter control command data structures, recognizable  
6 by a communicatively coupled accelerator including one or more parameters  
7 which, when received by the accelerator, affects one or more filter settings of the  
8 accelerator based, at least in part, on the content of the received command.

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10 2. A method according to claim 1, further comprising:  
11 passing the generated filter control command data structures to the  
12 accelerator, wherein the accelerator modifies one or more filter settings in  
13 accordance with the parameters embedded within the data structure.

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15 3. A method according to claim 1, wherein the filter is a post-processing  
16 filter.

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18 4. A method according to claim 3, wherein output data subsequent to the  
19 application of a post-processing filter are used as prediction references for  
20 decoding subsequent data.

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22 5. A method according to claim 3, wherein the post-processing filter is  
23 one or more of a deblocking filter, a de-ringing filter, and the like.  
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1           6.    A method according to claim 1, wherein the parameters include a  
2 strength parameter.

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4           7.    A method according to claim 6, wherein the generated data structure  
5 includes a strength parameter for each of one or more block boundaries of a frame.

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7           8.    A method according to claim 1, wherein the API issues filter control  
8 commands for each of a number of edges of luminance and chrominance blocks of  
9 received media content.

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11          9.    A method according to claim 1, wherein the API issues macroblock  
12 filter control command data structures for each macroblock of video picture  
13 content, each macroblock filter control command comprising four (4) or sixteen  
14 (16) luminance block filter control command data structures for controlling the  
15 filtering of the luminance blocks of the macroblock, and/or two (2), four (4), eight  
16 (8), sixteen (16), or thirty-two (32) chrominance block filter control command data  
17 structures for controlling the filtering of the chrominance blocks of the  
18 macroblock.

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20          10.   A storage medium comprising a plurality of executable instructions  
21 which, when executed, implement a method according to claim 1.

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23          11.   A computing system comprising:  
24           a storage medium having stored therein a plurality of executable  
25 instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement a method according to claim 1.

**12.** A storage medium comprising a plurality of executable instructions which, when executed, implement an application program interface (API) to dynamically generate one or more filter control command data structures in response to a command received from a decoder application, wherein the one or more filter control command data structure(s) include one or more parameters which, when received by a communicatively coupled accelerator, effect one or more filter settings on the accelerator in accordance with the received command.

**13.** A storage medium according to claim 12, wherein the filter control command data structure(s) effect one or more post processing filter(s) of the accelerator.

**14.** A storage medium according to claim 12, wherein the filter control command data structure(s) effect one or more of a deblocking filter(s), de-ringing filter(s), and/or another post processing filter of the accelerator

**15.** A storage medium according to claim 12, wherein the API issues a filter control command data structure for each of a number of edges of luminance and chrominance blocks of received media content.

1           **16.**    A storage medium according to claim 15, wherein the API issues  
2 four (4) filter control command data structures for each luminance block, and/or  
3 two (2) filter control command data structure(s) for each chrominance block.

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5           **17.**    A storage medium according to claim 12, wherein the parameter(s)  
6 include a filter strength parameter.

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8           **18.**    A computing system comprising:  
9           a decoder application to process received media content; and  
10          an operating system including an application program interface (API),  
11 support the media processing, wherein the API generates one or more filter control  
12 commands including one or more parameters which, when received by a  
13 communicatively coupled media processing accelerator, effect one or more filter  
14 settings of the accelerator in accordance with a command received from the  
15 decoder.

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17          **19.**    A computing system according to claim 18, further comprising:  
18          one or more media processing accelerator(s), communicatively coupled to  
19 the decoder application via the API, including one or more filter(s) responsive to  
20 the filter control command data structures reflecting information received in the  
21 command from the decoder.

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23          **20.**    A computing system according to claim 19, wherein the filter(s) are  
24 post processing filters.  
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1           21. A computing system according to claim 19, wherein the filter(s)  
2 include one or more of a deblocking filter, de-ringing filter, and the like.

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4           22. A computing system according to claim 18, wherein the API issues  
5 macroblock filter control command data structures for each macroblock of video  
6 picture content, each macroblock filter control command comprising four (4) or  
7 sixteen (16) luminance block filter control command data structures for controlling  
8 the filtering of the luminance blocks of the macroblock, and/or two (2), four (4),  
9 eight (8) , sixteen (16) or thirty-two (32) chrominance block filter control  
10 command data structures for controlling the filtering of the chrominance blocks of  
11 the macroblock.

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13           23. A computing system according to claim 18, wherein the filter  
14 control command data structures include a strength parameter to control an  
15 amount of filter applied by a receiving filter.

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17           24. A computing system according to claim 18, further comprising:  
18 a storage medium having stored therein a plurality of executable  
19 instructions; and  
20 an execution unit, coupled to the storage medium, to execute at least a  
21 subset of the plurality of executable instructions to implement the operating  
22 system and associated API.

1           25.    A computing system according to claim 24, wherein the execution  
2 unit executes at least a subset of the plurality of executable instructions to  
3 implement the decoder application.  
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